1997 VOLUME INDEX

This index serves as a ready reference to RSC articles and product announcements published from January through December 1997. The figure following the issue month refers to the page number.

A

A chilling supermarket solution (chillers)
By Scott Martin, Heatcraft May-28
A 'helical' solution (twin screw compressors)
By George Briley, Technicold Jul-42
A remote locale (ice machines)
By Scotsman Mar-30
A/C without HCFCs
By Gary Zyhowski, AlliedSignal Apr-26
Absorption chiller advantage, the
By Jennifer Hok, Trane Nov-18
Avoiding the 'condensate trap' trap
By Jon Summers, Trane Apr-32

B

Basics of oil separation take on coalescent twist (Temprite)
By Peter Powell May-30
Beyond water (ice machines)
By Manitowoc Mar-22
Boiler basics
By Jim Roche, Burnham Boilers Aug-20
Brazing with copper phosphorus alloys
By Wayne D. Rupert, Engelhard Jan-54

C

Catalog review Feb-32
Clean-up clues (compressors)
By United Rebuilders Jul-52

Contractors Corner

Arkansas dealer grows a business ... Apr-16
Competitive power companies may have a deal for you Jan-22
Contractors institute gears studies for service contractors Jan-22
Cool solutions to hot conditions Oct-20
Customer service could earn attention if long list of wholesaler needs is trimmed ..Feb-14
EDI moves into wholesaler domain at a less than rapid pace Mar-13
Education & taxes: Later may be too late
By Mark Battersby Jul-30
'Energy Star' loans help contractors sell systems Jun-18
Finding source of energy, savings easier than realizing those savings May-22
Generation X labor force may cause wholesalers to rethink employee relations Mar-12
IAQ's biggest headache may be the paperwork Nov-15
Is the boss talking merger mania?
By Tom Mahoney Sep-20
Life for any compressor depends on the installation
By R.M. Barr, United Rebuilders Jul-34
Merger mania reaches unionized commercial contractors Dec-16
One thing leads to another—and that could lead to higher energy bills Nov-14
Paper or plastic? It's now a question in high tech information transmission Sep-20
Plan/spec? Design/build? How about 'Performance Contracting'? Jan-26
Put a sticker on that furnace! Apr-18
'Rapid Growth Mode' may yield diversification Dec-16
Saving energy can be simple Nov-15
Service after the sale Dec-16
Service technicians: The silent sales staff
By John Teder May-22
Special care of top customers may be more important than broad customer base ..Dec-17
Supermarket puzzle pieces include desiccants, controls, open cases May-20
Switch gives utility company a say in summer a/c usage Jun-18
Training is key to successful business
By International Comfort Products ..Feb-14
Utility battle may be won in marketplace, not courts Dec-17
Utility General offers new insurance program for independent contractors May-24
Wholesalers urged to do more to help contractors find and keep customers Aug-14

Cooling with dehumidification
By Norm Christopherson May-40

D

Dealing with duct leakage
By Samuel Monger Jan-58
Deep reasons (deep vacuum evacuation)
By J/B Industries Jul-48
Dueling duo: Moisture and desiccants
By Parker Hannifin Dec-22

F

Figuring out refractometers Jun-28
Fine tuning refrigeration systems
By Billy C. Langley, Ed.D. Sep-26

From the Field

Are compressor starting relays interchangeable?
By Tim Losey Jul-70
Bringing curtain down on outside chill
By Mars Sales Co. May-63
Do-it-yourself portable detectors
By John Hinson Jan-75
Energy-efficient motors: Are they really more efficient?
By Carl Talbott, M&M/Mars Dec-43
Evacuate!! Then CHARGE!!!
By Norm Sulenes Jun-46
Figuring out furnaces with electronic controls
By Dennis Kalchuk, Heil Products ..Aug-47
Helping to hold cold water
By Maximicer Sep-51
Oversized valves or starving coils?
By Sporlan Valve Co. Oct-56
Some rules before ranting at motors
By Patrick Parnell Feb-56
The critical charge
By Danny Moore, Hoshizaki America Inc. Mar-46
Troubleshooting restricted air supply
By John Ogle, International Comfort Products Apr-54
Where we go wrong installing water-cooled screw chillers
By Karl Zander, Dunham-Bush Nov-44

H

Handling high superheat
By Andre Patenaude, Alco Controls Oct-34

Hotline

Additional coil problems Jul-18
Alternative refrigerants Dec-12
Avoiding high discharge heat Sep-14
Brazing query May-18
Capacitor disposal Jul-27,Sep-19
Compression joints in fridges Apr-15
Condensate seal necessity Mar-14
Condensate seals revisited Mar-16
Critical charge conditions May-15
Floating head pressure Feb-12, Oct-14
Gas leaks Feb-11
Grounded compressor cause for concern May-19
Hazardous cooling tower discharge ...May-14
HCl inquiry Apr-14
HFC servicing Sep-18
High side pressure too high Sep-17
Hot gas defrost vs. electric Jun-15
Humidity in office buildings Jun-12
'Iceyball'? Sep-16
Increasing head pressure Sep-14
Leak checking large refrigeration systems Jan-16
Mineral deposit removal Nov-9
More condensate seal info Jul-27
More on PTC relays Nov-9
More on reach-ins Jan-18
Motor control Dec-12
P-traps Feb-11
P-traps explained further Nov-10

1997 VOLUME INDEX

Propane mixtures Jan-14
Propane usage Jun-14
Pumping down a dual pressure control system May-16
Refrigerant confusion Oct-16
Refrigerant information Mar-16
Refrigerant recovery May-18
Safety relief devices Apr-14
Service agreement query May-19
Sightglass usage Jul-27
Start relay mystery Jan-16
Suction line traps Jun-15
Suction pressure Jul-18
System capacity/valve capacity Jul-16
Unbalanced voltage Oct-19
Volume of R-22 ..... Jul-29

I

Ice machine compressors: Check-outs & clean-ups
By Danny Moore and Duncan Sheridan, Hoshizaki America Inc. May-36
Inside info on inverters
By Darryl Van Son, Baldor Electric Co. ... Feb-26

Industry In Focus

A hot solution to defrost (Russell Heat Transfer) Feb-10
A new classic in compressors (Burton-Corblin) Apr-10
A perfect score includes clean air (Honeywell) Jan-10
A solution for swim meet sufferers (Dectron) Oct-12
A 'ton' of help (York International) Jul-11
Air conditioning—Hollywood style (Carrier Corp.) Jul-12
Ammonia action (RETA)
By Kelly Lindsey Aug-8
An indirect solution (King) Jun-10
Brazing info (Superior Flux & Mfg. Co.) Jun-10
Break down opens door for state of the art chiller (Carrier Corp.) Jul-12
Booming business adds to air quality anxiety Mar-11
Buy, convert, win (AlliedSignal) Sep-10
Certification hoopla starts May-11
Computer software can save drowning contractor (International Comfort Products) Jan-12
Concerning the Macarena and maps (FMI) Jan-11
Concerning the Year 2000 'computer crash' (York) Sep-10
Consolidator gains association head Sep-13
Counting costs via computer (MagneTek) Jan-11
Designing the future now (Trane) Nov-8
Even well run operations can use some fine tuning (Purolator Products) Apr-12
Everybody on the slope (York) Dec-10
Familiar fare (ColdZone) Jan-10
Finding the better fit results in 50 years in business (Russell Coil Co.) May-12
Foggy option (Mee Industries) May-11
Geothermal, dehumidification bliss (Geothermal Systems) Jun-10
Getting bigger (Convenience Products) Sep-12
HCFCs at sea (Elf Atochem) May-12
Here's proof R-134a is here to stay (Elf Atochem) Oct-12
Homeowner helper (Controlled Release Technologies) Jul-11
Honeywell recalls selected programmers Jul-11
Hot water humor? (National Energy Control Corp.) Apr-10
Lab speeds up testing (Fasco Motors Group) Apr-10
Looks bad, runs good (ColdZone) Aug-9
Manitowoc acquires SerVend Dec-9
Merger movement ends (ARW, NHRAW) Jul-11
Mission to McMinnville (Carrier Corp.) Apr-10
Mixing Miami and ice (Munters) Nov-9
More room (Heatcraft) Feb-10

New and Noteworthy (Companies mentioned)

Air-Conditioning & Refrigerating Institute (ARI) Jan-13, Apr-12
Air Conditioning Contractors of America Jul-14
Aireco Supply Inc. Feb-10
Alco Controls Mar-10
American-Standard Air Conditioning Sep-13
Baltimore Aircoil Feb-10
Bitzer Apr-12
Bristol Compressors Jun-11
California State Polytechnic Jan-13
Copeland Corp. . Jan-13, Aug-9, Nov-9, Dec-9
Danfoss Automatic Controls Jun-11
EDA Controls Apr-12
Electric Power Research Institute .. Jan-13
Engelhard/ICC Apr-12
Fasco Aug-9
Gustave A. Larson Co. Aug-9
Heatcraft Refrigeration Products Nov-9
Henry Valve Feb-10
Henry Vogt Machine Co. Feb-10
Honeywell ... Mar-10, Aug-9, Sep-13, Nov-9
HVAC Online Jun-11
IMI Cornelius Mar-10
Inter-City Products Dec-9
International Comfort Products Dec-9
Johnson Controls Jun-11, Aug-9
LaRoche Industries Feb-10
Mechanical Contractors Association of America May-12
Monson Corp. Jan-13
National Technician Certification Nov-9
Northamerican Heating, Refrigeration & Air Conditioning Wholesalers Association Apr-12
Parker Hannifin Corp. Refrigeration & Air Conditioning Div. Dec-9
Rapid Engineering Jun-11
Robertshaw, Uni-Line North America Sep-13
RSES Mar-10
RSES Garden State Chapter May-12
RSES Middle Atlantic Regional Association May-12
Scotsman Jul-14, Nov-9
Siebe Environmental Controls Sep-13
Tecumseh Products Apr-12
The BTR Power Drives Group Feb-10
The Trane Co. Jan-13, Apr-12, Nov-9
Trolex Mar-10
V.V. 'Solly' Solomon Sep-13
Van Air Systems Sep-13
Wagner Products Sep-13
York International Feb-10, Jun-11

New dehumidifier defines word 'massive' (Dectron) Apr-10
Nothing fishy about this way to communicate and cut costs (Johnson Controls) Feb-10
Of fluxes and fishes (Superior Flux & Mfg. Co.) Dec-9
Once upon a time, sports hype was about the ice (Carrier) Oct-12
Putting pays off (NIBCO Inc.) Jan-10
Raw in, finished out (Worthington Cylinders) Jan-12
Reciprocal distribution (Fluke, Hewlett-Packard) Sep-12
Refrigerant guide: Second edition (National Refrigerants) May-12
RETA focuses on education as aid to membership growth
By Kelly Lindsey Jul-11
Skills under pressure (VICA) Oct-13
Snow-capped mountains can't hide summer heat waves (York) Sep-10
Space age starkness (RSES) Jan-10
Taking a dip over your garage (Dectron) Mar-10
Teaching Canadians about ice? (Unicom Thermal) Mar-11
Tent a/c (Berner International) May-11
This 'mummy' is cool (Carrier Corp.) Jun-10
Top two (Scotsman) Dec-10
Up on the roof (Stevenson) Sep-10
Upscale hotel downscales chiller kW Jan-10
VICA efforts Dec-10
Wafer winner (Spectronics) Nov-8
Washing machines, Kremlin have common bond (York International) Jul-14
When a 'turnkey' is not a 'turkey' (Com-Trol) Dec-9
When hospital needs environmental help, variable frequency drive comes to rescue (ABB Industrial Systems) Jan-11
Wind tunnel gets caught in HFC fury . May-11

1997 VOLUME INDEX

M

Making sense of new refrigerants
By Jim Johnson Oct-28
Multimeter safety
By Fluke Corp. Jul-54

O

Oil factor in ammonia systems, the
By RECO Nov-22
Oil pressure problems (compressors)
By Steve Maxson, Heatcraft Jun-22
On the road again (service vehicles)
By GE Capital Fleet Services Feb-28
Operation of oil evacuator Jun-46

P

Preventive maintenance, or emergency service: What do you do?
By Heatcraft Sep-32

Product Profile

Condensing unit, controller trim time for installation, superheat setting (Heatcraft) Oct-43
Electric commercial and residential thermostats billed as next generation (Honeywell) Apr-50
Honeywell enters whole-house humidifier market Sep-44
Interactive paging expands technician-base communications
By Kelly Lindsey Jun-39
Johnson rollout targets refrigeration controls Aug-43
Mastercool introduces four-way manifold with ball valves
By Kelly Lindsey May-52
New tool brings term 'Quick' to changing of relief valve (RediControls)
By Peter Powell Mar-42
Powdered coil cleaner extends shelf life (Highside Chemicals)
By Kelly Lindsey Jan-63
200-plus year history leads to latest compressor technology (J & E Hall Ltd.)
By Peter Powell Dec-32
"Wet Switch" helps prevent flooding (Wagner)
By Kelly Lindsey Jul-66
When a negative may be best (Heatcraft) Nov-35

Products

Adapter kits Apr-48
Adaptive frequency drive Apr-49
Adjustable frequency drives May-57
Air conditioners and heat pumps Sep-46
Air filters Jul-64, Dec-35
Air purifier May-56
Air velocity meters Apr-49
Analyzer Jul-62
Ball valve Mar-44
Ball valve brochure Jun-41
Beverage dispenser Dec-33
Blacklight Sep-44
Brazed plate heat exchanger May-55
Catalog Oct-47
Centrifugal chillers Nov-38, Dec-32
Chiller brochure Aug-42
Clamp-on Sep-45
Coating Mar-42
Coil cleaner Jan-67, Jul-62
Coils Jun-41
Compressor analzyer Dec-35
Condensing unit May-55
Condensing unit hoods Oct-45
Control system May-54
Controller Jul-66
CO2 sensor Jan-66
Cooler/freezer monitor Sep-46
Crimper Nov-37
Cuber Sep-45, Oct-45
Current transducer May-52
Cutting tool Apr-49
Damper Jan-67
Data logger Oct-47
Defrost controller May-56
Digital fan speed controller Jul-62
Digital multimeter Mar-43
Duct stretcher Jul-65
Epoxy Jan-63
Failure detector May-52
Filter-dryer May-56
Fitting Nov-39
Flood detector Jan-66
Floor heating system Dec-34
Flow sensor May-52
Foam insulation Apr-48
Gas monitor Dec-33
Hand cleaning towels Nov-38
Hand-held thermometers Dec-32
Heat exchangers Oct-47
Humidifier Nov-39
Humidifiers Aug-42
Humidistat Dec-33
Ice flaker Jul-62
Ice machine Jan-63, 67
Ice makers Nov-35
Ice transportation cart Jul-64
Icemaker Oct-45
Infrared thermometer Apr-48
Leak detection lamp Aug-42
Leak detector May-57, Oct-44, Nov-37
Level Oct-44
Level indicators Oct-48
Level sensor Mar-44
Level switch brochure Jul-63
Low water cut-off May-55
Lube oil control Jun-41
Lubricant Mar-44
Meter Jun-40
Mineral units Mar-42
Monitor catalog Sep-44
Motor guide Oct-48
Multimeter Jan-65
Nutdrivers Mar-43
Offset crimper Sep-46
Oil level regulator May-54
Oil-less compressor May-52
Power pliers Nov-38
Pressure transmitters Mar-42
Probes Jun-40
Protection module Oct-43
Proximity switch tester Jan-65
Pump Oct-48
Pump controller May-54
Purge Jun-38
Purge system Jul-67
Push-pull fittings Jul-67
Reference guide Dec-34
Refrigerant lead detector Jun-38
Refrigerant monitor Jan-63, May-57, Jun-38
Refrigeration control system Jun-40
Refrigerators Mar-42
Refrigerant charging system Dec-34
Retrofit procedure Mar-43
RMS Jan-64
Rooftop systems Oct-43
Scale Jan-64, May-53, Oct-47, Oct-48
Scale removing powder May-53, Sep-44
Screw chillers May-52
ScrewGrab Jul-65
Sealants Oct-47
Service handbooks Oct-45
Setpoint controls Oct-44
Silicone lubricants Jul-62
Skin protection lotion Jul-64
Software Dec-35
Solenoid valve Jul-67
Solenoid valve coils Jul-62
Spray cylinders Dec-34
Start relay Dec-34
Stop valve Jan-63
Strap wrench Jan-66
Temperature/RH data logger Jul-62
Thermocouple thermometers Jan-66
Thermostats Dec-32
Tool box Jan-65
Unit heater Nov-39
UVC light Jul-63
Vacuum/pressure pumps Oct-44
Vacuum pump Oct-45
Vacuum system Nov-35
Valve May-54, Sep-45, Oct-43
Valves May-52, 56
Vaporizer Dec-32
Vaporizer/mixer system Oct-48
Video training program Oct-44
Water systems additive Jan-63
Wrench May-53
Wrist support Sep-44
Zone valve Nov-38

Q

Quick and easy superheat
By Fluke Corp. Jan-52
Quick sizing of burner orifices
By B.R. Engelking Aug-34

1997 VOUME INDEX

R

Readers Respond By Peter Powell

Computers, Yea; Internet, Nay Mar-38
Contractors, technicians hold own in computer technology changes Dec-31
New oils? No big deal, you say Jun-33

Recovery & Regulations

AlliedSignal markets fluorocarbon products in Japan Jun-44
ARI publishes new reclaimer directory Jan-68
ARI releases updated refrigerant database Nov-42
CFC excise tax up (Refron) Mar-40
CFC/HCFC update
By Mike Heidenreich, Heatcraft Heat Transfer Div. Jan-68
CFCs May-60
Commodore signs joint venture with Australian company May-58
DuPont reaches SUVA refrigerants milestone Nov-40
DuPont recommends raising HCFC-123 to 50 PPM Oct-49
EPA proposes to extend purity requirement (Refron) Mar-40
Genetron Retrofit/Conversion Team to focus on educating contractor Apr-52
German technicians under government orders to end use of CFCs
By Peter Powell Feb-55
Greencool touts drop-in Jul-68
HCFC supplies adequate for today's equipment; HFC usage soars, while CFC reclamation stagnates Apr-52
HFCs winning the war for the heart of supermarkets, new and old May-58
Hudson Technologies forms alliance with DuPont Apr-52
ICI Klea completes expansion of 134a facility Feb-54
ICI Klea expands site Dec-36
Keep that environmental watchdog—even in post-CFC era
By Peter Powell Nov-40
Making the switch: Going from R-12 to R-401A (Copeland) Sep-47
Making the switch: Going from R-12 to R-401B (Copeland) Oct-49
National Refrigerants' lab certified to ARI Standard 700 .....Jun-42
No more CFCs? Not quite
By Peter Powell Dec-37
Oil change system reduces mineral oil content Jun-44
R-12 shortage skyrockets price
By Refron Jan-72
R-22 prices on the rise (Refron) Mar-40
Recovery cylinders need retest Aug-44
Refrigerant safety even more important
By Air Conditioning Contractors of America Jan-70
Refron publishes directory of cylinder retest facilities Jun-44
Secondary loop continues to gain primary importance
By Peter Powell Feb-54
Secondary loop, natural gas refrigeration up and running for real
By Peter Powell Dec-36
ShopRite saves time and money with Rapid Retrofit procedure from ICI Aug-44
Slower than expected chiller phaseouts rapidly drawing down CFC suppliers Jul-68
Technicians got bogus cards after certification test scam May-60
United Refrigeration upgrades communications Dec-36
U.S. opposes European proposal to advance HCFC production ban Jun-42
U.S. opposes speed-up of HCFC phaseout ..Oct-49

S

Seeking out service vans requires much more than kicking tires
By Peter Powell Feb-30

Service Session By John Tomczyk

Balanced port TEVs May-26
Compressor superheat Aug-16
Discharge bypass valves Jan-28
Internal vs external equalized TXVs ..Mar-18
Refrigeration system charging Oct-22
Restricted air flow over the evaporator of a frosted evaporator coil Jul-38
Suction line accumulators Sep-22
Systematic troubleshooting Dec-19
TEV remote bulb charges Apr-20
Thermostatic expansion valves Feb-16
Three-phase voltage unbalance Nov-16
Three-way head pressure control valves ..Jun-20

Showcase By Peter Powell

A new line, a new letter to remember ..Nov-33
AHR Expo features 1,000 exhibitors ...Jan-61
Changes, refinements, expansion mark ice machine showcase Nov-30
Condenser manufacturers expand diversified product lines May-42
Defrost controls, accumulator designs among refrigeration attention getters at expo May-45
Expo starts products on road to service technicians' trucks Jun-35
Good news: Technology constant, even with glitzy look Sep-40
Hydrocarbons find once solid ground in Europe a bit shaky Mar-35
IAQ products cover broad range market opportunities Aug-41
New computer technology expands hvacr design work Jun-37
New detector seeks out troubles before leaks become big headache Jul-60
Recips decline, gas/electric power ploys, secondary loop hoopla top trends in supermarkets Aug-36
Rotating barrels a popular way to make ice in Europe Mar-34
Saudi air conditioning expertise, beer sign enticements, maintenance via the Internet: Ways to do business at IKK Apr-38
Scroll compressors gain worldwide foothold Apr-45
TEV remote bulb charges Apr-20
Tools, test instruments turn colorful thanks to 'ultraviolet' and 'infrared' trends Jul-59
Wilshire moves into IMI Cornelius fold Sep-42
Who talks to who Nov-33
Simple truth about motor-drive compatibility, the (variable frequency drives)
By Phil Langhorst & Clyde Hancock, Magnetek Dec-26
Solving the oil issue when retrofitting with HFCs
By Nu-Calgon Jun-28
Sounding it out (ultrasonic leak detection)
By Amprobe Instruments Jan-34
Suction line accumulators & the 'holding tank' myth
By Parker Hannifin Corp. Aug-30

U

Ultrasonic alternative, the
By Paul Tashian, Superior Signal Oct-40

Viewpoint By Peter Powell

Bigger is better for supermarket contractors Jan-6
'Free agent' technicians May-6
Little Red Schoolhouse not so quaint anymore Jul-6
Never a final word Apr-6
New technology accelerates arrival of pieces and parts to assembly line Sep-6
No rules about what the rules have to be Nov-6
One way to keep up with control changes Mar-6
Refrigeration contractors: A rare breed Dec-6
Report from Germany: Six-sided halls, bar stools, the Autobahn, and 'Baywatch' Feb-6
So what's the big deal about the seal? Jun-6
The drive is to Adjustable Speed Drives and technicians need to keep up Oct-8
The wonders of the Web have to have you wondering Aug-6

W

What about those arguments against deep vacuum?
By J/B Industries Jul-49
What to do when you have to cut lines (brazing) Jan-55
Why 410A? Apr-28
Working safely (circuits) .....Jul-56 ❑